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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/551,520

06/08/2006

Amine Benachenhou

16297-1US JP/mp

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20988 7590 03/21/2008

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EXAMINER

POPOVICS, ROBERT J

ART UNIT

PAPER NUMBER

1797

MAIL DATE

DELIVERY MODE

03/21/2008

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/551,520	<b>Applicant(s)</b> BENACHENHOU, AMINE	
	<b>Examiner</b> Robert J. Popovics	<b>Art Unit</b> 1797	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 21 December 2007.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-10 and 12-58 is/are pending in the application.  
4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 8,35 and 36 is/are allowed.
- 6) ☒ Claim(s) 1-7,9,10,12-34 and 37-58 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                       | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

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**DETAILED ACTION**

***Claim Rejections - 35 USC § 102***

Claims 1-7,9-10,12-34 and 38-58 are rejected under 35 U.S.C. 103(a) as obvious over the combined teachings of GB 2,083,370 and WO 02/20115. See figures 12 and 17-19.

(57) A method and apparatus for oil-water separation utilises a coalescing element having a coalescing layer of polymeric gel applied to a porous base, the layer being water-insoluble and oil-repelling to coalesce dispersed oil. The direction of flow through the element is periodically reversed to prevent clogging, and the coalesced oil is separated from the water in a downstream settling tank.

FIG. 12

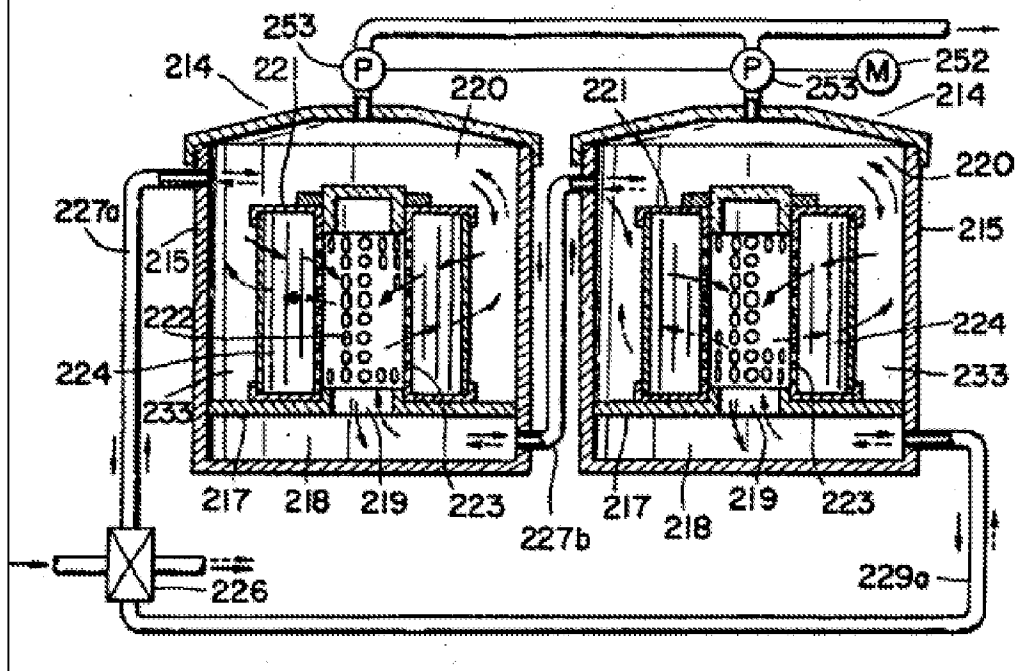


FIG. 18

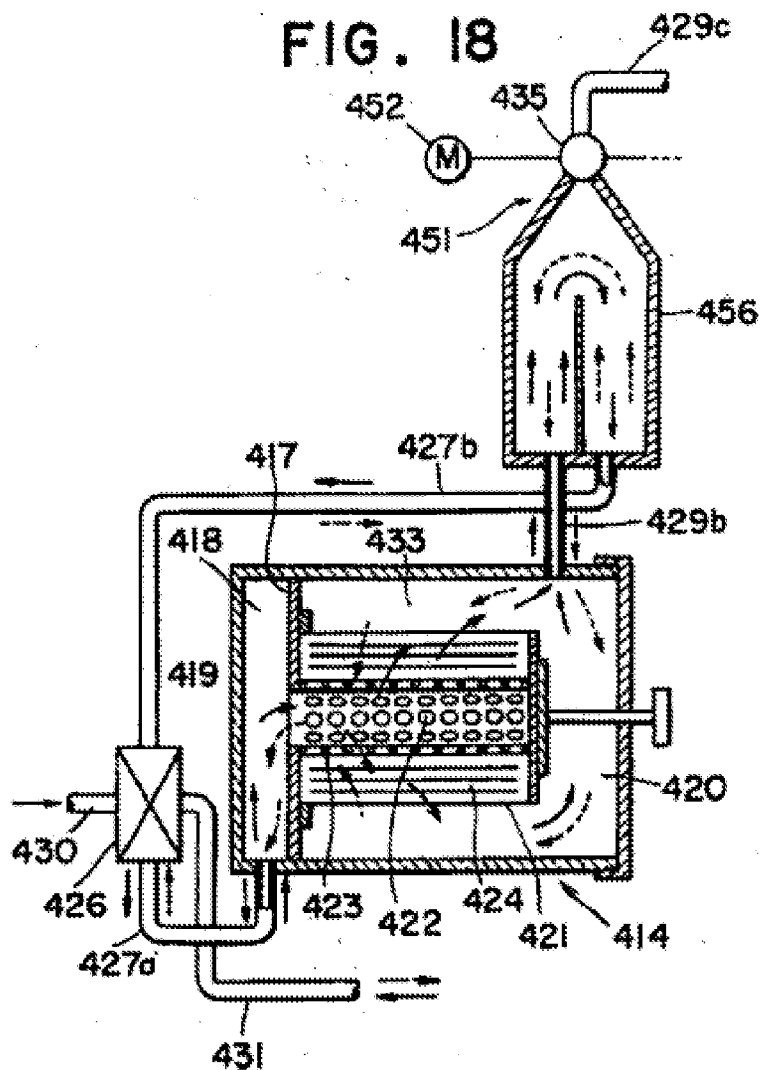
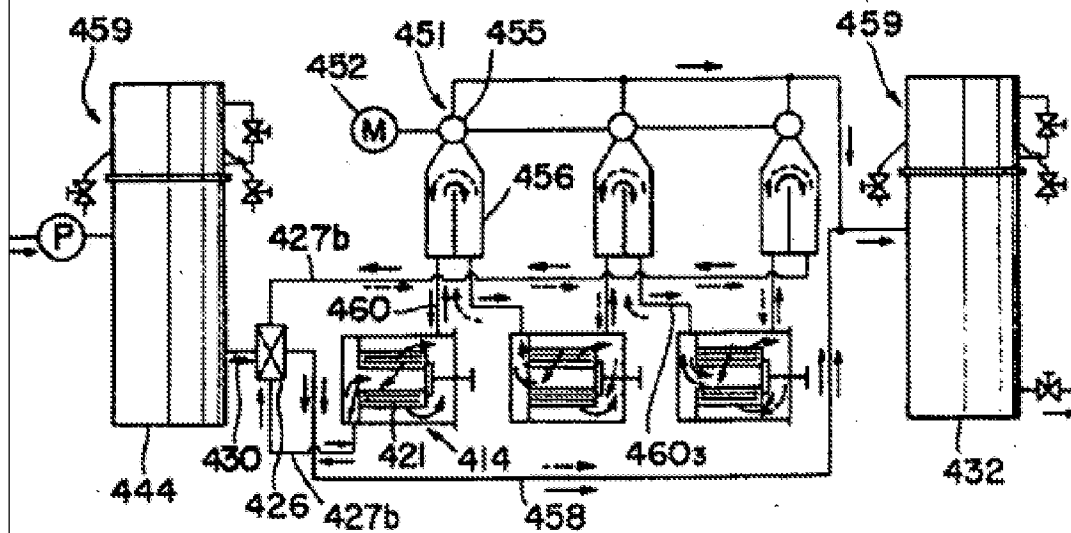
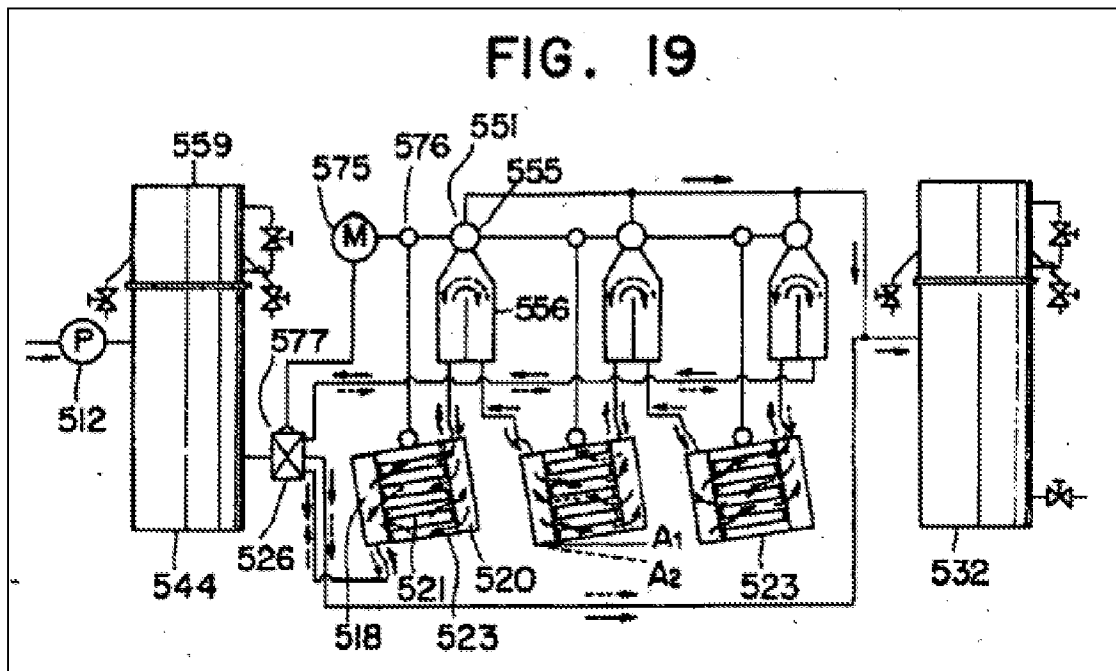


FIG. 17





From page three of Applicant's PG Pub:

[0038] The principal physical property differences between the preferred absorbent of the invention and that of the prior art (WO 02/20115), are the percentage void space and the homogeneity of the porous mass. The preferred absorbent has at least one of the properties listed in Table 1 and preferably a plurality of properties listed in Table 1.

It would have been obvious to those skilled in the art to employ the known absorbent of WO 02/20115 in the system of GB 2,083,370 because of its known ability to treat/separate emulsions. The parameters that are asserted to differentiate this known material from Applicant's "*preferred absorbent*," are, in the absence of a clear showing of unexpected results specifically associated therewith, seen to constitute parameters that would have been routinely manipulated/optimized by those skilled in the art, in order to address varying process conditions, such as varying percent compositions, particle diameter,

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etc. Accordingly, the language of the claims, is not seen to patentably distinguish over the combination of GB 2,083,370 and WO 02/20115.

***Response to Arguments***

Applicant's arguments filed December 21, 2007 have been fully considered but they are not persuasive.

Applicant has asserted:

Furthermore, the '370 professes to separate particles less than 10  $\mu\text{m}$ . The person of ordinary skill in the art would understand that "less than 10  $\mu\text{m}$ " is very different from the separation of particles close to 0  $\mu\text{m}$ , in size. Furthermore, if the '370 application could trap particles substantially less than 10  $\mu\text{m}$ , the '370 application would have suggested that it could. Therefore, less than 10  $\mu\text{m}$  is likely to be interpreted as trapping particles of approximately 10  $\mu\text{m}$ . Therefore the applicant respectfully submits that there is no suggestion in '370 that particles of at least 0.5  $\mu\text{m}$  can be coalesced, or in other words that droplets up to 20 times smaller than those suggested in '370 can be separated.

This self-serving interpretation is not found persuasive. The range of less than 10 microns is clearly stated! The arguments presented with respect to the size of the vessels used, do not appear to be commensurate with the scope of the claims. This action is NOT FINAL.

Any inquiry concerning this communication should be directed to Robert J. Popovics at telephone number (571) 272-1164.

**/Robert James Popovics/  
Primary Examiner  
Art Unit 1797**

**Search Notes**

Application/Control No.

10/551,520

Examiner

Robert James Popovics

Art Unit

**1797****SEARCHED**

Class	Subclass	Date	Examiner

**INTERFERENCE SEARCHED**

☐ PGPUB search conducted; search logic is attached.

Date: \_\_\_\_\_ Initials: \_\_\_\_\_

**SEARCH NOTES  
(INCLUDING SEARCH STRATEGY)**

	DATE	EXMR
Text Search Conducted.	9-29-07	RJP
Text Search Conducted.	3-17-08	RJP